

# Morbidity and Mortality

Weekly  
Report

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE

Prepared by the

COMMUNICABLE DISEASE CENTER

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PROVISIONAL INFORMATION ON SELECTED NOTIFIABLE DISEASES IN THE UNITED STATES AND ON  
DEATHS IN SELECTED CITIES FOR WEEK ENDED JUNE 13, 1964

## RABIES SURVEILLANCE SUMMARY ISSUE

### RABIES

A total of 94 cases of rabies in animals was reported for the week ended June 13. This brings to 2,216 the cumulative total thus far in 1964, an increase of 18 percent compared to the 1,871 reported for the comparable period of 1963.

Of the 2,216 cases reported to date, the 7 states in the West North Central region account for 713 (32 percent), an increase of 268 (60 percent) compared to the first 24 weeks of 1963. The principal states contributing to this rise are Minnesota, Iowa and Missouri, which have reported 585 rabies in animals (26 percent of the U.S. total). For the comparable period of last year,

these 3 states reported 362 cases.

The greatest rise in reported cases occurred in the East South Central States (298 vs. 156 cases), where Tennessee has reported a 246 percent rise (242 vs. 70 cases) this year. Thus far in 1964, Tennessee has reported more rabies in animals than any other state, accounting for 11 percent of the 1964 national total.

As discussed in the surveillance summary elsewhere in this issue, the majority of reported cases are wild-life cases.

No case of human rabies has been reported thus far in 1964.

Table 1. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous weeks)

Disease	24th Week Ended		Median 1959 - 1963	Cumulative, First 24 Weeks		
	June 13, 1964	June 15, 1963		June 13, 1964	June 15, 1963	Median 1959 - 1963
Aseptic meningitis .....	39	37	---	693	570	---
Brucellosis .....	7	8	11	178	158	256
Diphtheria .....	12	6	7	134	129	298
Encephalitis, primary infectious ..	53	---	---	853	---	---
Encephalitis, post-infectious .....	28	33	---	465	697	---
Hepatitis, infectious including serum hepatitis .....	648	660	660	20,263	22,343	22,344
Measles .....	12,377	12,224	13,202	395,173	319,225	340,473
Meningococcal infections .....	49	48	38	1,406	1,363	1,258
Poliomyelitis, Total .....	1	6	17	36	68	203
Paralytic .....	1	5	14	28	59	138
Nonparalytic .....	-	1	---	7	3	---
Unspecified .....	-	-	---	1	6	---
Streptococcal Sore Throat and Scarlet fever .....	6,485	4,856	---	240,509	206,241	---
Tetanus .....	8	9	---	107	98	---
Tularemia .....	11	8	---	129	102	---
Typhoid fever .....	9	6	15	163	162	252
Rabies in Animals .....	94	70	63	2,216	1,871	1,869

Table 2. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	2	Psittacosis:	14
Botulism:	9	Rabies in Man:	-
Leptospirosis: Hawaii - 1, Fla - 1	12	Smallpox:	-
Malaria: Ky - 1	42	Typhus-	
Plague:	-	Murine:	7
		Rky Mt. Spotted: NJ - 1, Mo - 1	35

## RABIES SURVEILLANCE SUMMARY - 1963

One case of human rabies was reported during 1963, the lowest total ever recorded. During the same period, 3,392 confirmed cases of animal rabies were recorded. This total represents a slight increase over the 1962 figure. Rabies in animals annual totals have shown a small increase since reaching an all time low in 1960. The 1963 increase was due to epidemics in different wildlife hosts in certain geographic sections of the country. A long term review of human rabies and a report on the surveillance of animal rabies follows.

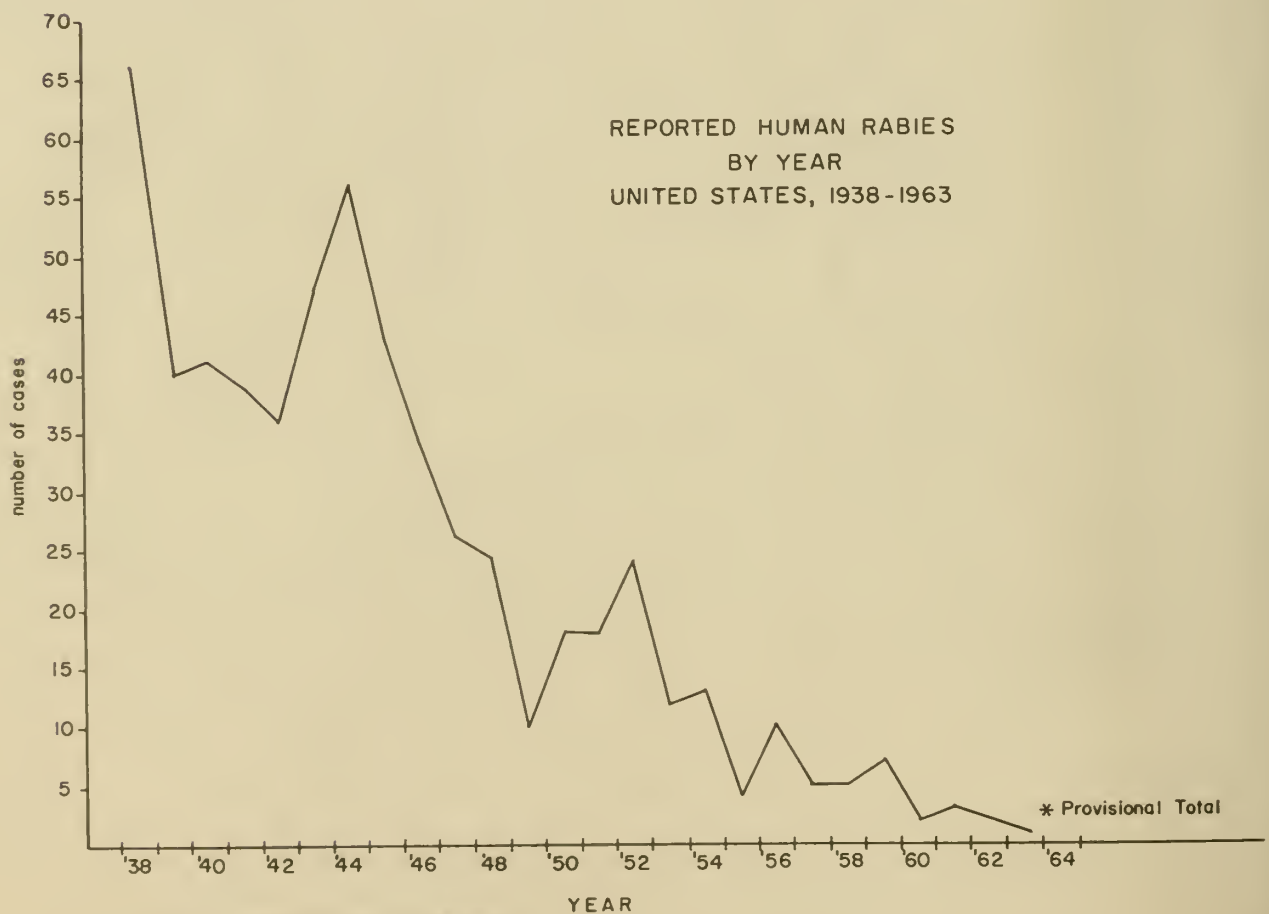
## HUMAN

The one case of human rabies reported during 1963 occurred in Pickens County, Alabama. The details are summarized below.

## U. S. HUMAN RABIES DEATH - 1963

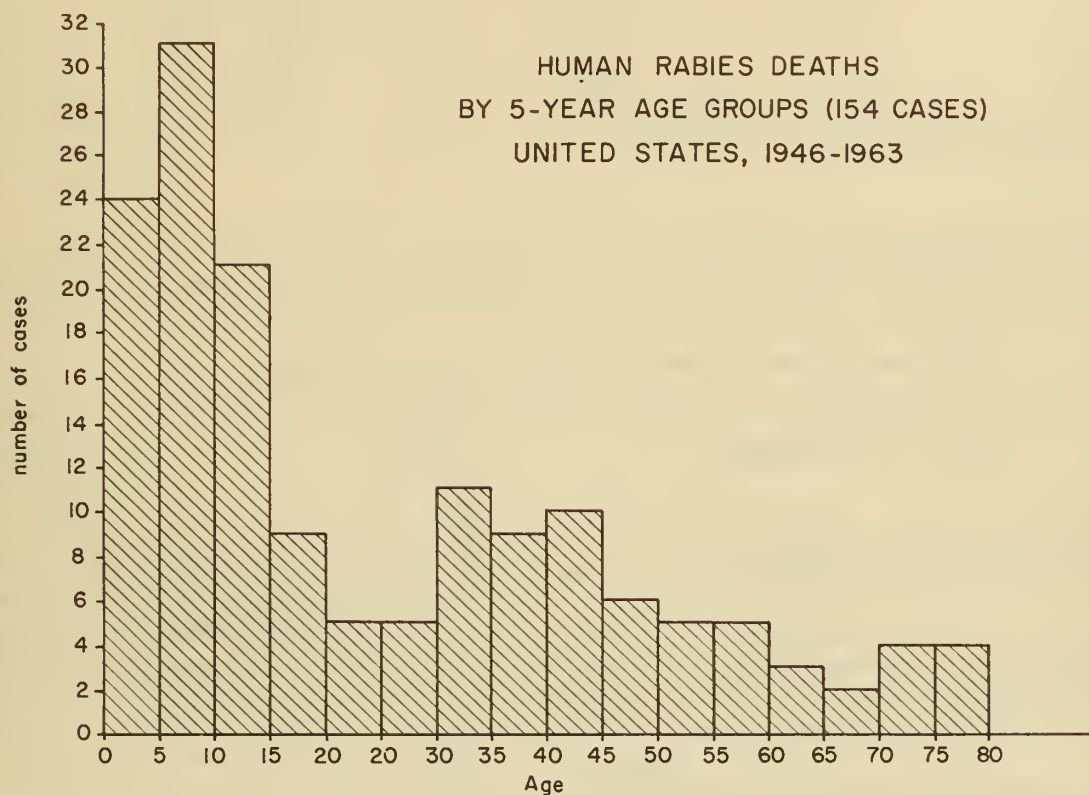
LOCALITY	DATE DIED	AGE	SEX	NATURE OF EXPOSURE	INCUBATION PERIOD	LENGTH OF ILLNESS	TREATMENT	BITING ANIMAL
1. Pickens County, Alabama	9/4/63	52	F	Unknown	Unknown	7 days	None	Probably dog

A graph of human rabies since 1938 is shown below:

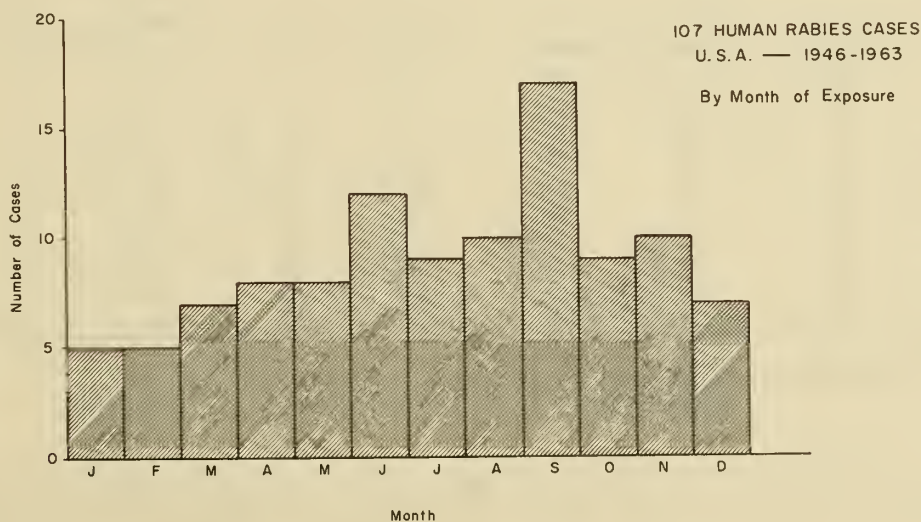


During the period 1946 - 1963, human deaths from rabies totalled 218.

In this same period the greatest incidence occurred in children under 15 years of age with a peak in the 5-9 age group. The age distribution of 154 deaths by 5 year age group is shown in the following graph.



September represented the month during which the greatest number of exposure occurred. The 107 cases with known month of exposure are shown below:



A breakdown of the range of incubation periods according to severity of exposure is shown in the following table:

#### INCUBATION PERIODS RELATED TO SEVERITY OF EXPOSURE IN 135 FATAL HUMAN RABIES CASES - U.S., 1946 - 1963

	Severe Exposure*	Superficial Exposure	Unknown or Severity Not Reported	TOTAL
No. of Cases	48	18	69	135
Median (days)	22	60	44	38
Range (days)	6-156	20-270	7-240	6-270

\*Includes severe, multiple, deep, head or face bites

Source: CDC Data

The length of illness ranged from one to 20 days in 152 cases. The median was 4 days.

During the past 25-years, a definite change in the type of host exposure has occurred. Whereas domestic animals constituted 100 per cent of exposures during the post war years, these animals caused about one-half of the rabies cases around 1960; thus wild animals have become an increasingly important source of human rabies cases.

#### FATAL HUMAN RABIES BY SOURCE OF EXPOSURE - UNITED STATES, 1946 - 1963

Period	No. of Cases	Dog or Cat Exposure		Fox, Skunk or Bat Exposure	
		Cases	%	Cases	%
1946-1949	48	48	100	0	0
1950-1953	54	49	91	5	9
1954-1957	29	24	83	5	17
1958-1961	15	8	53	7	47
1962-1963	3	(Sources Unknown)			
Total	149				

Source: CDC Data

#### ANIMALS

A total of 3,932 laboratory confirmed cases of animal rabies was reported throughout the United States in 1963, an increase of 206 cases as compared to 1962.

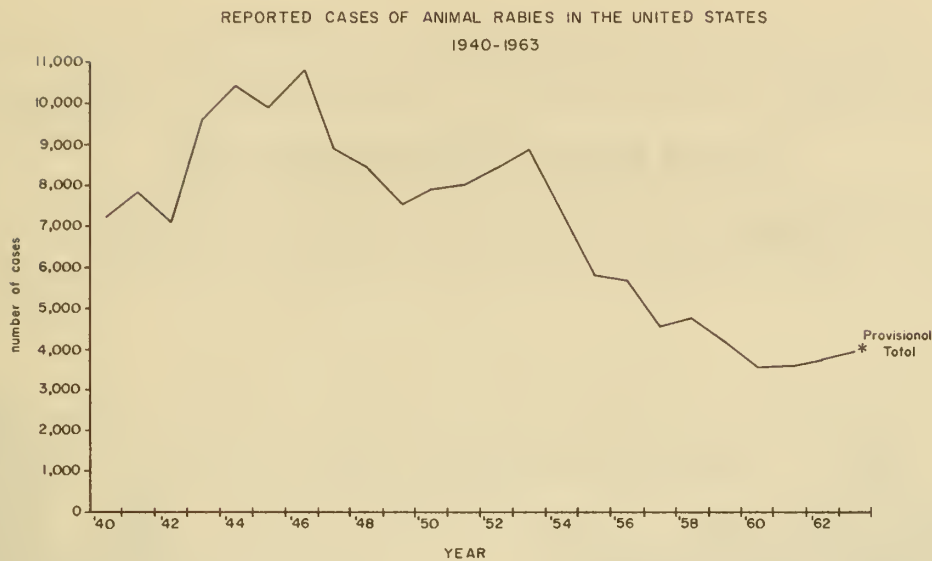
#### INCIDENCE OF RABIES IN THE UNITED STATES BY TYPE OF ANIMAL 1953-1963\*

YEAR	DOGS	CATS	FARM ANIMALS	FOXES	SKUNKS	BATS	OTHER ANIMALS	MAN	TOTAL
1953	5,688	538	1,118	1,033	319	8	119	12	8,835
1954	4,083	462	1,032	1,028	547	4	118	13	7,287
1955	2,657	343	924	1,223	580	14	98	4	5,843
1956	2,592	371	794	1,281	631	41	126	10	5,846
1957	1,758	382	714	1,021	775	31	115	5	4,801
1958	1,643	353	737	845	1,005	68	157	5	4,813
1959	1,119	292	751	920	789	80	126	7	4,084
1960	697	277	645	915	725	88	108	2	3,457
1961	594	217	482	614	1,254	186	120	3	3,470
1962	565	232	614	594	1,449	157	114	2	3,727
1963*	573	217	531	622	1,462	303	224	1	3,933

\*Provisional Total

Sources: USDA, ARS and MMWR Annual Supplements

This rise appears due primarily to a general increase in bat rabies and to an epidemic of rabies in raccoons in the southeast, as well as to an extension of a large epidemic of skunk rabies in the central part of the country, the emergence of epidemic fox rabies in New England and increased concentration of dog rabies cases along the U.S. - Mexico border.

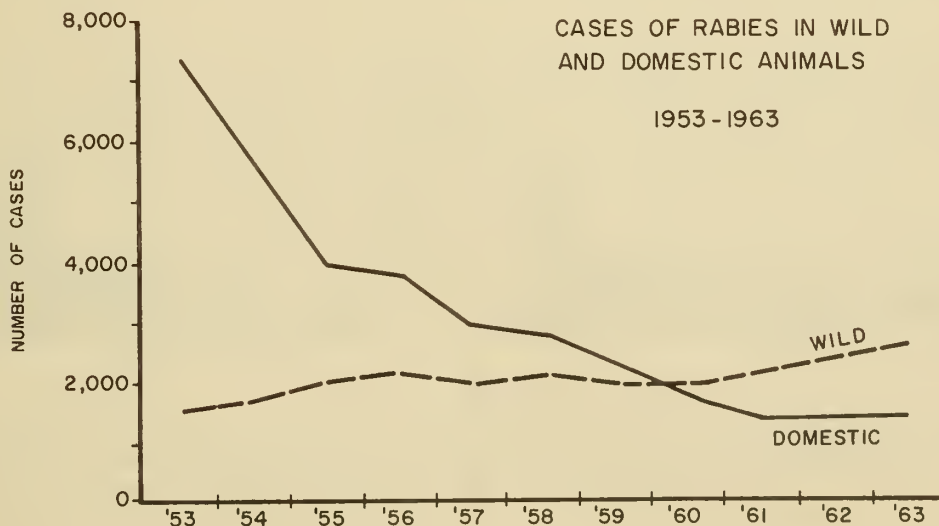


### Secular Trends

Animal rabies cases have declined since 1946, with a sharp drop from 1953 to 1960. Since 1960, however, a slight increase is evident (see above). Despite this decreased incidence of animal rabies, about one-third of the counties in the United States reported rabies in 1963, as well as in 1953.

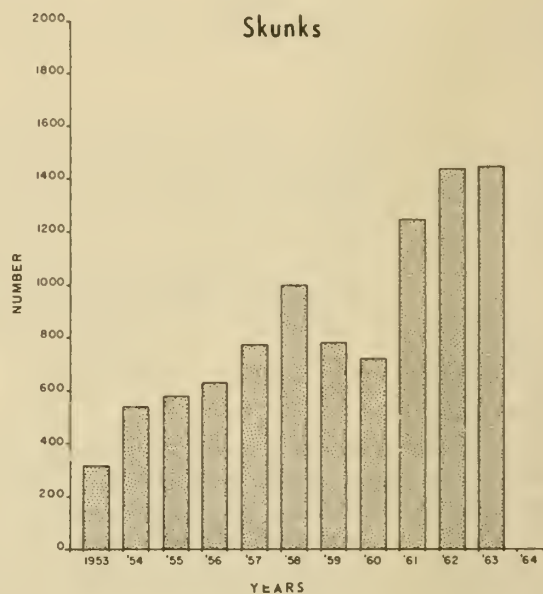
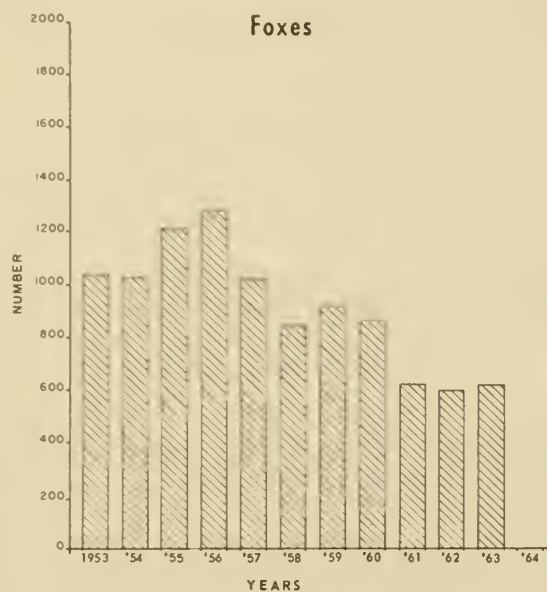
Of note is the change in distribution of rabies in animal hosts, for the overall decrease is due to the reduced number of cases in domestic animals (see below), particularly in dogs. Since 1960, rabies cases in wildlife have exceeded those in domesticated animals. Nationwide, no progress in reducing the number of rabies cases in domestic animals has been achieved for several years. On this basis, it appears that further reductions in the incidence of rabies will come only after measures are found to control the disease in wildlife.

The incidence of fox rabies has declined during the past decade while that of skunk rabies has increased (see p. 204). Since the initial isolation of rabies from an insectivorous bat in Florida in 1953, a large number of rabid bats have been found throughout the United States, many in areas reporting few or no cases of rabies in other host species. In contrast, the significant increase of raccoon rabies is the result of a highly localized epidemic, which first appeared in Florida and has since moved slowly northward.

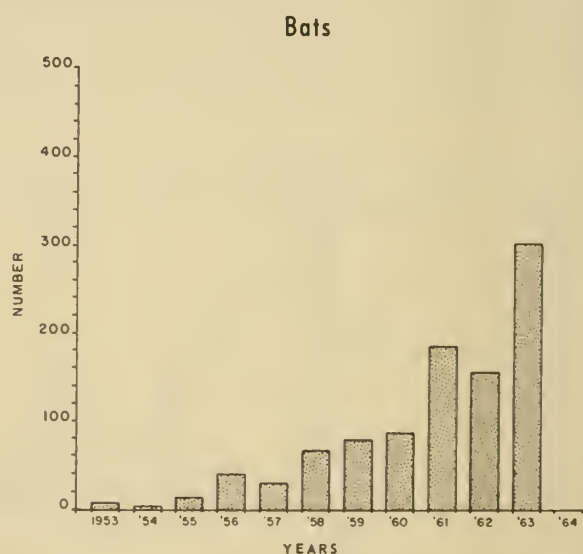
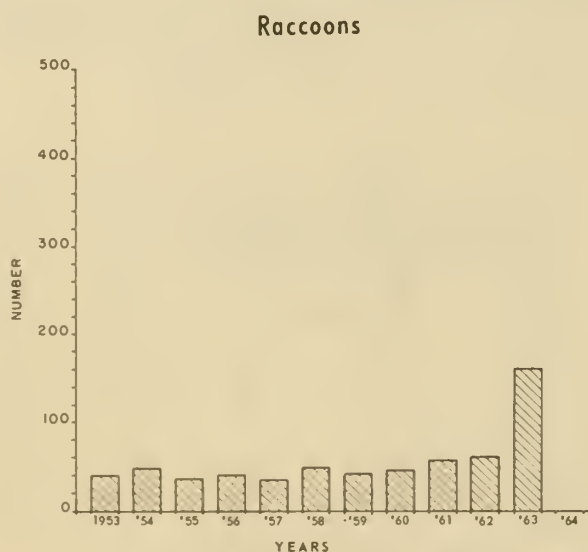


Source: USDA, ARS, and USPHS, CDC

## CASES OF RABIES IN TRADITIONAL WILDLIFE HOSTS



## CASES OF RABIES IN EMERGING WILDLIFE HOSTS



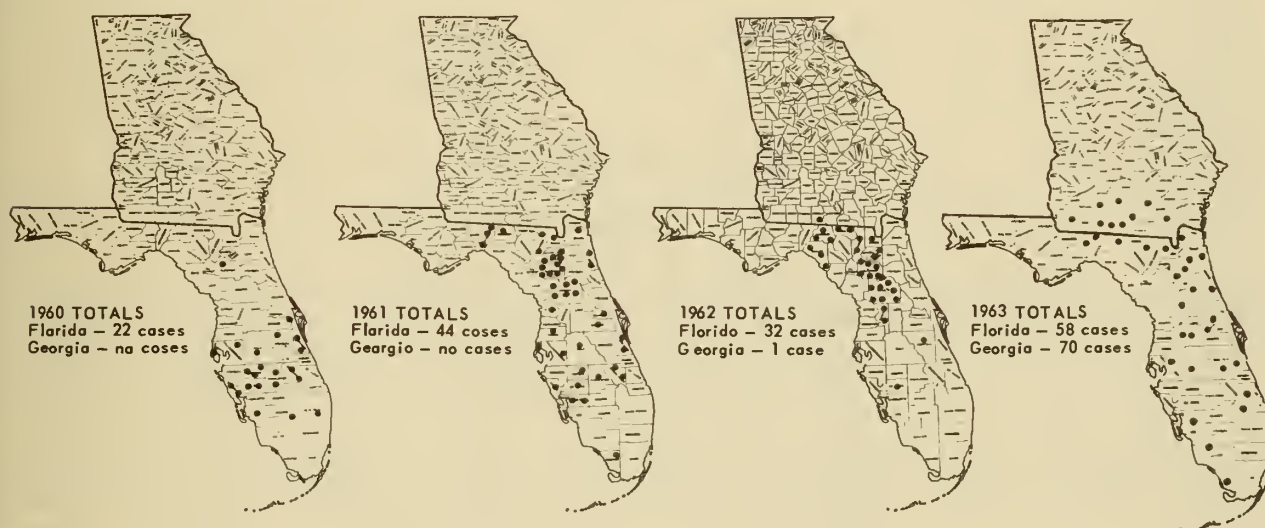
### Specific Hosts

In 1963, 541 counties in 31 States reported 1,462 cases of **skunk** rabies as contrasted to the 1,449 cases in 479 counties in 24 States in 1962. Thereby, skunks continued to be the greatest single source of animal rabies in the United States as they were during the 2 preceding years. The rabid skunk problem covers much of the central portion of the country where large number of cases are reported from Iowa, Minnesota, Ohio, and Texas. California also reports large numbers of rabid skunks.

**Raccoon** rabies is a local problem in the southeastern United States. An epidemic involving this host began in southern Florida 4 years ago and has since moved northward at a slow, steady pace. It is now a major problem in parts of south Georgia. Of the 1963 cases, 79 per cent occurred in Georgia and Florida. The remarkable character of this epidemic continues to be the well defined wave of cases which marks its advance along a broad front, in contrast to the usual diffuse pattern of epidemic rabies.

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### RACCOON RABIES - FLORIDA AND GEORGIA



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**Fox** rabies increased slightly from 594 cases in 1962 to 622 cases in 1963. The most important change occurred in northern New England (Vermont, New Hampshire, and western Maine) and New York. These areas have long been rabies free, but were involved in an extension of an epidemic which moved southeastward across the province of Quebec. The rabid foxes from this new focus of infection account for the increased number of fox rabies cases in 1963.

Although **dog** rabies is similar in incidence to 1962, its geographic concentration is shifted. The areas of the United States with the greatest concentration of enzootic and epizootic dog rabies are found along the Mexican border. In 1962 one-sixth of all the rabid dogs found in the United States were in counties bordering Mexico. In this same area dog rabies cases increased from 136 in 1962 to 180 in 1963; this is nearly one-third of the 573 cases in this host reported in the entire country last year. Dog rabies was reported in Vermont and New Hampshire for the first time in nearly 4 decades last year.

Rabid **bats** were diagnosed twice as frequently in 1963 as 1962, with cases reported from 36 States. Many of the 1963 cases were reported from western States. The 3 Pacific coast States reported 89, Arizona 26, New Mexico 18, and Nevada 11. As in the past, however, the distribution of bat rabies appears to be more diffuse than localized, with the number of rabid bats reported correlating rather well with the current level of interest in that area.

There was no confirmed rabies in mice, rats, or wolves.



## State Reports

In 1963, 45 States reported rabies cases, (see p. 208) compared to 39 in 1962. Connecticut, Rhode Island, Mississippi, Wyoming, and Hawaii reported no rabies in 1963. New Hampshire and Vermont reported rabies for the first time since national surveillance began in 1938.

Sizable increases in the number of rabies cases compared to previous years occurred in Arizona, Georgia, Kansas, Nevada, New Hampshire, New Mexico, Oklahoma, South Carolina, Vermont, Virginia, and Washington. Texas reported the largest number of cases during 1963. The 10 States reporting the largest number of cases during 1963 are listed below:

<u>State</u>	<u>Number of Cases</u>
1. Texas	525
2. Iowa	343
3. Ohio	308
4. California	307
5. Minnesota	273
6. Virginia	238
7. Missouri	178
8. Illinois	157
9. Tennessee	138
10. Kentucky	122

All but 2 of these, Virginia and Illinois, were among the top 10 in 1962.

(Reported by Rabies Surveillance Unit, CDC.)

## INTERNATIONAL NOTES

## RABIES - Canada

A 14-year-old Fort Huntington, Quebec girl died of rabies March 15, the first human case reported in Canada this year.

About February 15, while sleeping in her home, she was bitten on the face by a skunk. Awakened by her cries, the father grabbed the skunk and threw it out the window; he was bitten on the hand. Rabies was not considered, and the incident was passed over at that time; no physician was called to examine the child.

On March 3, the girl experienced malaise and fever; she remained at home. A few days later, she bit her mother. Because of the persistence of her fever and her unusual behavior, she was admitted to a local hospital for observation. Her condition deteriorated. On March 12, her illness undiagnosed, she was transferred to a children's hospital in Montreal. Rabies was diagnosed clinically. During her hospitalization in Montreal, the girl bit one of her nurses. The child died in coma March 15; rabies was confirmed by laboratory examination of the brain specimen.

Rabies antiserum and rabies duck embryo vaccine were administered to the father, mother, and the nurse. They have not developed symptoms of rabies.

(Reported by Dr. A. R. Foley, Epidemiologist, Quebec Department of Health).

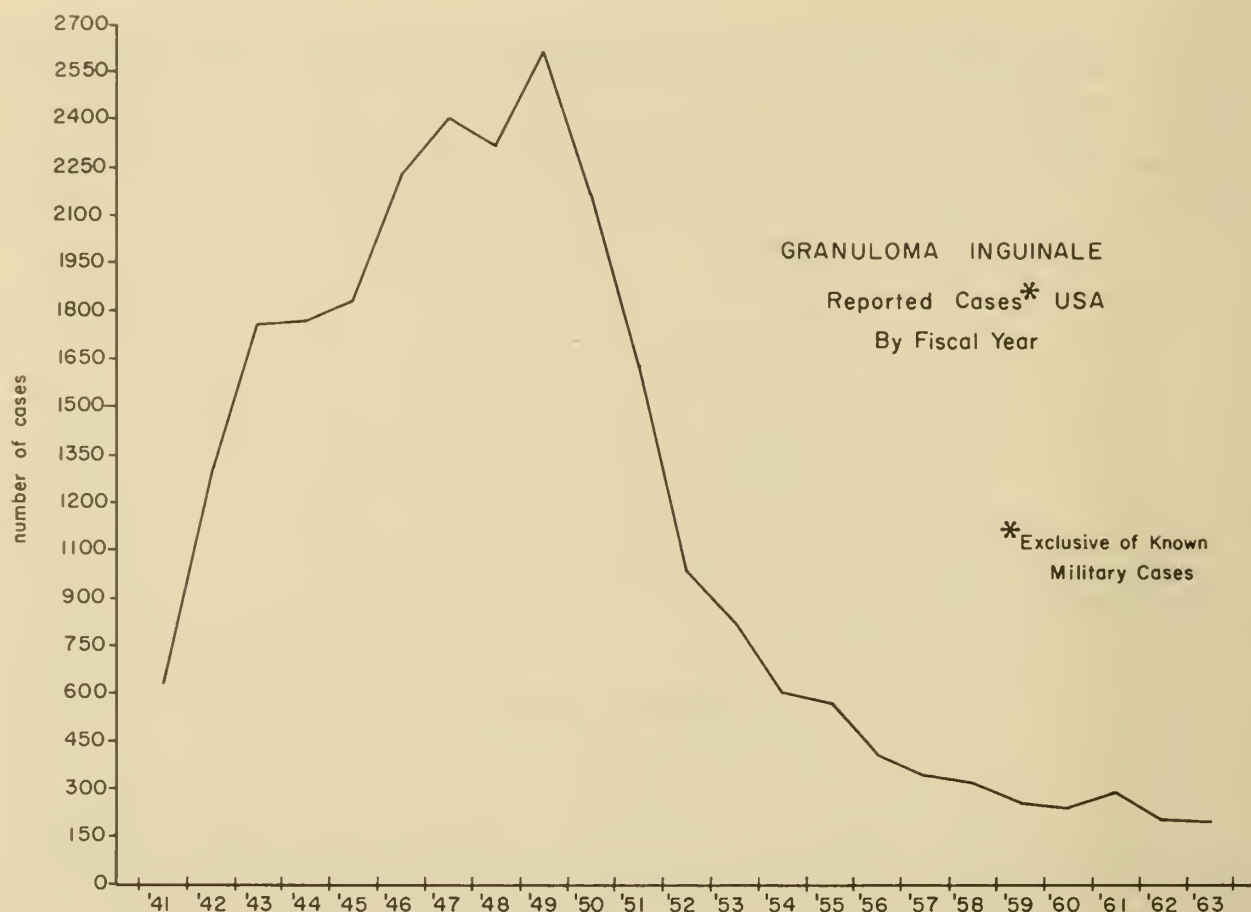
*Editor's Note:* This is the only case of human rabies yet reported in Canada or the United States of America in 1964.

## VENEREAL DISEASE SUMMARIES

## GRANULOMA INGUINALE

A total of 196 civilian cases of granuloma inguinale was reported in the United States for the fiscal year ended June 30, 1963, compared to 203 cases reported the previous fiscal year.

Reported cases of granuloma inguinale rose rapidly during the 1940's from 639 cases in 1941 to a peak of 2,403 cases in 1949; case reports declined sharply after 1949 to the current low of 196 cases (see graph on the following page).



During 1963, 7 states and the District of Columbia reported 10 or more cases, accounting for 155 (79 percent) of the 196 cases:

State	Cases
Florida	39
New York	26
Georgia	24
Virginia	17
District of Columbia	15
Texas	13
Alabama	11
Louisiana	10

In fiscal 1963, the male-female ratio of cases was 2.4 to 1; 90 percent of all 1963 cases were in non-white individuals. Private physicians and institutions reported 12 percent of the cases; the remainder were reported by venereal disease clinics and other public institutions.

(Reported by Venereal Disease Branch, CDC.)

#### INFECTIOUS SYPHILIS - MAY

A total of 1,818 cases of infectious syphilis (primary and secondary) was reported for the month of May (see table opposite page). This figure compares to the 1,952 cases reported for May, 1963, a decline of 7 percent.

The total for the first 5 months of 1964 is 9,330, compared to 9,198 cases reported for the comparable period of 1963. This represents an increase of 1.4 percent for this period of time.

SUMMARY OF REPORTED CASES OF INFECTIOUS SYPHILIS  
MAY 1964 - MAY 1963

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas May 1964 and May 1963 - Provisional data

Reporting Area	May		Cumulative Jan - May		Reporting Area	May		Cumulative Jan - May	
	1964	1963	1964	1963		1964	1963	1964	1963
NEW ENGLAND.....	43	54	204	191	EAST SOUTH CENTRAL.....	153	145	630	630
Maine.....	-	-	1	2	Kentucky.....	16	13	55	47
New Hampshire.....	-	-	6	3	Tennessee.....	37	35	183	175
Vermont.....	2	-	3	1	Alabama.....	64	65	296	287
Massachusetts.....	27	31	122	101	Mississippi.....	36	32	96	121
Rhode Island.....	1	6	7	11	WEST SOUTH CENTRAL.....	215	267	1,046	1,172
Connecticut.....	13	17	65	73	Arkansas.....	14	20	82	94
MIDDLE ATLANTIC.....	404	498	2,257	2,487	Louisiana.....	67	60	267	265
Upstate New York.....	48	54	291	244	Oklahoma.....	8	20	53	78
New York City.....	223	271	1,317	1,400	Texas.....	126	167	644	735
Pa. (Excl. Phila.).....	11	17	53	66	MOUNTAIN.....	35	58	216	219
Philadelphia.....	29	57	147	325	Montana.....	2	2	7	2
New Jersey.....	93	99	449	452	Idaho.....	-	1	4	1
EAST NORTH CENTRAL.....	176	162	927	826	Wyoming.....	1	-	7	4
Ohio.....	40	34	223	165	Colorado.....	3	5	10	20
Indiana.....	1	5	25	22	New Mexico.....	12	15	98	47
Downstate Illinois.....	12	8	63	49	Arizona.....	16	23	72	102
Chicago.....	82	72	369	375	Utah.....	1	1	5	11
Michigan.....	36	35	228	183	Nevada.....	-	11	13	32
Wisconsin.....	5	8	19	32	PACIFIC.....	150	209	1,016	902
WEST NORTH CENTRAL.....	37	35	237	190	Washington.....	5	3	26	57
Minnesota.....	14	5	64	31	Oregon.....	4	6	33	20
Iowa.....	4	2	14	17	California.....	140	195	947	812
Missouri.....	12	17	99	76	Alaska.....	1	1	5	3
North Dakota.....	-	1	-	4	Hawaii.....	-	4	5	10
South Dakota.....	3	2	24	9	U. S. TOTAL.....	1,818	1,952	9,330	9,198
Nebraska.....	3	4	22	25	TERRITORIES.....	58	90	323	324
Kansas.....	1	4	14	28	Puerto Rico.....	56	88	312	317
SOUTH ATLANTIC.....	605	524	2,797	2,521	Virgin Islands.....	2	2	11	7
Delaware.....	2	1	39	19					
Maryland.....	35	59	225	224					
District of Columbia.....	53	48	241	297					
Virginia.....	22	18	114	122					
West Virginia.....	2	4	18	22					
North Carolina.....	107	80	427	371					
South Carolina.....	70	63	381	279					
Georgia.....	110	69	504	418					
Florida.....	204	182	848	769					

Note: Cumulative Totals include revised and delayed reports through previous months.

## Morbidity and Mortality Weekly Report

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
JUNE 13, 1964 AND JUNE 15, 1963 (24TH WEEK)

Area	Aseptic Meningitis		Encephalitis		Poliomyelitis, Total Cases				Poliomyelitis, Paralytic			
			Primary	Post-Inf.	1964	1963	Cumulative		1964	1963	Cumulative	
	1964	1963					1964	1963			1964	1963
UNITED STATES...	39	37	53	28	1	6	36	68	1	5	28	59
NEW ENGLAND.....	-	2	2	1	-	-	-	1	-	-	-	1
Maine.....	-	-	-	-	-	-	-	1	-	-	-	1
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	-	-	-	-
Massachusetts.....	-	1	-	-	-	-	-	-	-	-	-	-
Rhode Island.....	-	1	-	-	-	-	-	-	-	-	-	-
Connecticut.....	-	-	2	1	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	6	4	15	4	-	1	5	8	-	1	5	6
New York City.....	2	-	3	-	-	-	1	-	-	-	1	-
New York, Up-State.....	3	2	-	4	-	1	2	5	-	1	2	5
New Jersey.....	1	-	11	-	-	-	2	-	-	-	2	-
Pennsylvania.....	-	2	1	-	-	-	-	3	-	-	-	1
EAST NORTH CENTRAL...	6	7	4	9	-	-	3	16	-	-	3	13
Ohio.....	1	1	1	-	-	-	2	4	-	-	2	3
Indiana.....	-	2	-	-	-	-	-	2	-	-	-	1
Illinois.....	3	-	-	9	-	-	1	6	-	-	1	5
Michigan.....	2	3	3	-	-	-	-	3	-	-	-	3
Wisconsin.....	-	1	-	-	-	-	-	1	-	-	-	1
WEST NORTH CENTRAL...	-	3	4	-	1	-	2	2	1	-	1	2
Minnesota.....	-	2	1	-	-	-	-	2	-	-	-	2
Iowa.....	-	1	-	-	-	-	-	-	-	-	-	-
Missouri.....	-	-	-	-	1	-	2	-	1	-	1	-
North Dakota.....	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota.....	-	-	2	-	-	-	-	-	-	-	-	-
Nebraska.....	-	-	-	-	-	-	-	-	-	-	-	-
Kansas.....	-	-	1	-	-	-	-	-	-	-	-	-
SOUTH ATLANTIC.....	1	-	10	1	-	2	16	9	-	1	12	7
Delaware.....	-	-	-	-	-	-	-	-	-	-	-	-
Maryland.....	-	-	1	-	-	-	1	-	-	-	1	-
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	-	-	-
Virginia.....	1	-	-	1	-	1	-	2	-	-	-	1
West Virginia.....	-	-	-	-	-	-	1	1	-	-	1	1
North Carolina.....	-	-	1	-	-	-	7	2	-	-	3	2
South Carolina.....	-	-	1	-	-	-	2	-	-	-	2	-
Georgia.....	-	-	-	-	-	-	1	1	-	-	1	-
Florida.....	-	-	7	-	-	1	4	3	-	1	4	3
EAST SOUTH CENTRAL...	2	2	2	-	-	1	3	4	-	1	1	3
Kentucky.....	2	2	1	-	-	-	-	-	-	-	-	-
Tennessee.....	-	-	-	-	-	-	1	1	-	-	-	1
Alabama.....	-	-	-	-	-	-	2	2	-	-	1	1
Mississippi.....	-	-	1	-	-	1	-	1	-	1	-	1
WEST SOUTH CENTRAL...	6	5	5	-	-	1	2	14	-	1	2	14
Arkansas.....	-	-	2	-	-	-	-	-	-	-	-	-
Louisiana.....	-	-	2	-	-	1	-	12	-	1	-	12
Oklahoma.....	2	2	-	-	-	-	1	-	-	-	1	-
Texas.....	4	3	1	-	-	-	1	2	-	-	1	2
MOUNTAIN.....	4	5	4	-	-	-	4	1	-	-	3	1
Montana.....	-	-	-	-	-	-	-	-	-	-	-	-
Idaho.....	-	-	-	-	-	-	-	1	-	-	-	1
Wyoming.....	-	-	-	-	-	-	2	-	-	-	2	-
Colorado.....	3	4	3	-	-	-	1	-	-	-	1	-
New Mexico.....	-	-	-	-	-	-	1	-	-	-	-	-
Arizona.....	-	1	1	-	-	-	-	-	-	-	-	-
Utah.....	1	-	-	-	-	-	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	14	9	7	13	-	1	1	13	-	1	1	12
Washington.....	2	-	1	-	-	-	-	1	-	-	-	1
Oregon.....	-	-	1	-	-	-	1	-	-	-	1	1
California.....	12	9	5	13	-	1	-	11	-	1	-	10
Alaska.....	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii.....	-	-	-	-	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	4	-	-	-	4

## Morbidity and Mortality Weekly Report

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Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
JUNE 13, 1964 AND JUNE 15, 1963 (24TH WEEK) - CONTINUED

Area	Brucellosis		Diphtheria		Infectious Hepatitis including Serum Hepatitis						Typhoid Fever	
	1964	Cum.	1964	Cum.	Total	Under 20 years	20 years and over	Age Unknown	Cumulative		1964	Cum.
		1964		1964	1964	1964	1964	1964	1964	1963		1964
UNITED STATES...	7	178	12	134	648	295	308	45	20,263	22,343	9	163
NEW ENGLAND.....	-	2	9	42	60	27	32	1	2,095	2,476	-	10
Maine.....	-	-	9	39	14	6	8	-	707	1,141	-	-
New Hampshire.....	-	-	-	-	1	-	1	-	148	173	-	-
Vermont.....	-	-	-	-	1	1	-	-	259	30	-	-
Massachusetts.....	-	2	-	3	23	11	12	-	427	736	-	5
Rhode Island.....	-	-	-	-	4	1	2	1	112	57	-	5
Connecticut.....	-	-	-	-	17	8	9	-	442	339	-	-
MIDDLE ATLANTIC.....	-	3	-	5	164	89	75	-	4,589	4,271	3	28
New York City.....	-	-	-	1	29	12	17	-	674	582	1	12
New York, Up-State.....	-	1	-	-	83	51	32	-	2,037	1,915	1	5
New Jersey.....	-	-	-	2	16	9	7	-	830	647	-	1
Pennsylvania.....	-	2	-	2	36	17	19	-	1,048	1,127	1	10
EAST NORTH CENTRAL...	3	22	-	6	89	40	41	8	3,076	3,583	2	37
Ohio.....	-	1	-	-	29	14	13	2	807	1,025	-	19
Indiana.....	-	1	-	-	4	1	3	-	270	347	1	8
Illinois.....	2	14	-	6	12	6	6	-	519	772	-	5
Michigan.....	-	2	-	-	36	18	18	-	1,252	1,272	1	4
Wisconsin.....	1	4	-	-	8	1	1	6	228	167	-	1
WEST NORTH CENTRAL...	-	81	1	20	37	17	17	3	1,143	1,040	2	14
Minnesota.....	-	3	-	11	5	1	4	-	104	175	-	-
Iowa.....	-	46	-	-	3	3	-	-	166	187	-	3
Missouri.....	-	5	-	-	14	5	7	2	286	405	1	6
North Dakota.....	-	2	1	1	-	-	-	-	42	29	1	1
South Dakota.....	-	12	-	1	-	-	-	-	104	49	-	1
Nebraska.....	-	11	-	-	1	-	-	1	25	75	-	-
Kansas.....	-	2	-	7	14	8	6	-	416	120	-	3
SOUTH ATLANTIC.....	-	15	2	27	46	22	21	3	1,904	2,354	-	33
Delaware.....	-	-	-	-	-	-	-	-	41	31	-	-
Maryland.....	-	-	-	-	10	4	6	-	361	273	-	1
Dist. of Columbia..	-	-	-	-	1	1	-	-	31	67	-	-
Virginia.....	-	6	-	-	3	2	-	1	281	510	-	7
West Virginia.....	-	-	-	-	10	7	2	1	318	378	-	-
North Carolina.....	-	1	-	-	9	3	6	-	356	596	-	11
South Carolina.....	-	-	-	4	3	1	2	-	69	88	-	3
Georgia.....	-	6	2	20	1	-	1	-	42	96	-	1
Florida.....	-	2	-	3	9	4	4	1	405	315	-	10
EAST SOUTH CENTRAL...	2	10	-	5	21	8	11	2	1,376	2,313	1	17
Kentucky.....	-	3	-	-	6	2	2	2	580	677	-	6
Tennessee.....	2	3	-	1	8	2	6	-	478	920	-	7
Alabama.....	-	3	-	2	4	3	1	-	199	341	1	3
Mississippi.....	-	1	-	2	3	1	2	-	119	375	-	1
WEST SOUTH CENTRAL...	-	18	-	16	51	22	25	4	1,481	1,485	-	10
Arkansas.....	-	4	-	-	4	1	3	-	161	166	-	4
Louisiana.....	-	1	-	5	13	5	8	-	324	274	-	2
Oklahoma.....	-	2	-	-	3	1	2	-	82	77	-	3
Texas.....	-	11	-	11	31	15	12	4	914	968	-	1
MOUNTAIN.....	1	14	-	1	34	7	3	24	1,292	1,500	-	3
Montana.....	-	-	-	-	2	-	1	1	114	212	-	-
Idaho.....	-	-	-	-	4	-	-	4	137	236	-	-
Wyoming.....	-	-	-	-	-	-	-	-	42	21	-	-
Colorado.....	-	-	-	-	6	-	-	6	367	320	-	-
New Mexico.....	-	1	-	1	8	6	1	1	185	178	-	-
Arizona.....	-	1	-	-	12	-	-	12	291	351	-	3
Utah.....	1	11	-	-	2	1	1	-	115	172	-	-
Nevada.....	-	1	-	-	-	-	-	-	41	10	-	-
PACIFIC.....	1	13	-	12	146	63	83	-	3,307	3,321	1	11
Washington.....	-	-	-	11	13	4	9	-	366	556	-	1
Oregon.....	-	1	-	-	15	7	8	-	367	438	-	-
California.....	1	12	-	1	108	45	63	-	2,402	2,242	1	10
Alaska.....	-	-	-	-	6	5	1	-	110	63	-	-
Hawaii.....	-	-	-	-	4	2	2	-	62	22	-	-
Puerto Rico	-	-	-	4	15	13	2	-	361	353	-	8

Table 3. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
JUNE 13, 1964 AND JUNE 15, 1963 (24TH WEEK) - CONTINUED

Area	Measles	Meningococcal Meningitis		Streptococcal Sore Throat and Scarlet Fever		Tetanus		Tularemia		Rabies in Animals			
		1964	1964	Cumulative		1964	1963	1964	Cum. 1964	1964	Cum. 1964	1964	Cum. 1964
				1964	1963								
UNITED STATES...	12,377	49	1,406	1,363	6,485	4,856	8	107	11	129	94	2,216	
NEW ENGLAND.....	755	1	40	86	1,068	528	-	3	-	-	-	12	
Maine.....	133	-	5	15	162	5	-	-	-	-	-	10	
New Hampshire.....	21	-	-	4	18	7	-	-	-	-	-	1	
Vermont.....	71	-	1	3	1	6	-	-	-	-	-	1	
Massachusetts.....	212	-	18	37	80	80	-	3	-	-	-	-	
Rhode Island.....	107	1	3	9	94	30	-	-	-	-	-	-	
Connecticut.....	211	-	13	18	713	400	-	-	-	-	-	-	
MIDDLE ATLANTIC.....	1,470	10	138	184	403	288	1	8	-	-	2	51	
New York City.....	302	3	26	24	18	17	-	-	-	-	-	-	
New York, Up-State..	361	2	50	58	277	194	-	2	-	-	1	48	
New Jersey.....	418	4	19	26	43	47	1	4	-	-	-	-	
Pennsylvania.....	389	1	43	76	65	30	-	2	-	-	1	3	
EAST NORTH CENTRAL...	3,016	4	204	225	683	584	1	11	1	11	14	299	
Ohio.....	292	-	59	62	84	64	-	2	-	1	7	159	
Indiana.....	516	-	33	27	93	49	-	1	-	1	2	17	
Illinois.....	540	1	45	40	93	72	-	4	1	7	1	68	
Michigan.....	1,220	-	46	69	279	310	1	3	-	1	2	25	
Wisconsin.....	448	3	21	27	134	89	-	1	-	1	2	30	
WEST NORTH CENTRAL...	411	3	87	80	135	90	1	6	1	26	37	713	
Minnesota.....	30	1	19	16	3	14	-	-	-	1	8	212	
Iowa.....	268	1	5	4	56	18	-	2	-	1	20	257	
Missouri.....	6	-	44	28	18	1	-	2	1	16	6	116	
North Dakota.....	107	-	8	4	54	56	-	-	-	-	2	38	
South Dakota.....	-	-	-	4	3	-	-	1	-	-	-	57	
Nebraska.....	-	-	5	19	-	-	-	-	-	-	1	20	
Kansas.....	NN	1	6	5	1	1	1	1	-	8	-	13	
SOUTH ATLANTIC.....	769	11	326	254	542	312	1	39	1	18	12	303	
Delaware.....	14	-	4	2	1	6	-	-	-	-	-	-	
Maryland.....	59	-	23	40	245	8	-	2	-	-	-	-	
Dist. of Columbia..	3	-	9	4	10	2	-	-	-	-	-	-	
Virginia.....	358	1	36	63	191	113	-	5	1	4	6	186	
West Virginia.....	155	2	22	13	-	51	-	1	-	-	1	19	
North Carolina.....	3	3	56	39	28	19	-	12	-	4	-	3	
South Carolina.....	54	2	48	13	34	29	-	3	-	-	1	1	
Georgia.....	2	2	44	16	2	3	-	1	-	10	4	54	
Florida.....	121	1	84	64	31	81	1	15	-	-	-	40	
EAST SOUTH CENTRAL...	1,627	4	133	108	875	853	1	14	2	19	9	298	
Kentucky.....	240	3	46	24	57	96	-	2	-	1	3	42	
Tennessee.....	602	-	45	46	770	665	1	7	-	12	5	242	
Alabama.....	762	1	25	21	2	6	-	4	-	3	1	14	
Mississippi.....	23	-	17	17	46	86	-	1	2	3	-	-	
WEST SOUTH CENTRAL...	1,400	5	131	138	563	499	-	10	4	37	7	321	
Arkansas.....	5	-	13	8	-	2	-	2	2	19	-	80	
Louisiana.....	6	4	95	57	1	2	-	3	1	1	-	30	
Oklahoma.....	24	1	5	27	42	1	-	-	1	15	3	51	
Texas.....	1,365	-	18	46	520	494	-	5	-	2	4	160	
MOUNTAIN.....	584	2	53	43	1,087	921	1	3	2	18	2	82	
Montana.....	87	-	-	3	33	40	-	-	2	10	-	-	
Idaho.....	34	1	2	3	71	91	-	-	-	-	-	-	
Wyoming.....	2	-	3	1	1	13	-	1	-	4	-	-	
Colorado.....	97	1	11	11	487	444	-	-	-	-	-	4	
New Mexico.....	60	-	21	3	207	186	-	1	-	-	1	39	
Arizona.....	163	-	3	7	125	92	-	-	-	-	1	39	
Utah.....	141	-	5	12	163	55	1	1	-	4	-	-	
Nevada.....	-	-	8	3	-	-	-	-	-	-	-	-	
PACIFIC.....	2,345	9	294	245	1,129	781	2	13	-	-	11	137	
Washington.....	398	2	23	18	197	93	-	1	-	-	-	-	
Oregon.....	364	-	18	15	10	5	-	-	-	-	1	2	
California.....	1,545	7	240	199	892	602	1	11	-	-	10	135	
Alaska.....	11	-	6	6	10	30	-	-	-	-	-	-	
Hawaii.....	27	-	7	7	20	51	1	1	-	-	-	-	
Puerto Rico	152	-	17	4	16	13	-	31	-	-	1	11	

Table 4 (D). TOTAL DEATHS AMONG PERSONS 65 YEARS AND OVER IN REPORTING CITIES

(Tables 4(A), 4(B), 4(C), and 4(D) will be published in sequence covering a four-week period.)<sup>o</sup>

Area	For weeks ending				Area	For weeks ending			
	5/23	5/30	6/6	6/13		5/23	5/30	6/6	6/13
<b>NEW ENGLAND:</b>					<b>SOUTH ATLANTIC:</b>				
Boston, Mass.....	140	91	168	163	Atlanta, Ga.....	49	44	53	36
Bridgeport, Conn.....	26	28	17	33	Baltimore, Md.....	107	143	115	108
Cambridge, Mass.....	19	25	22	13	Charlotte, N.C.....	15	17	21	15
Fall River, Mass.....	14	25	27	11	Jacksonville, Fla.....	32	47	23	21
Hartford, Conn.....	30	26	29	21	Miami, Fla.....	41	42	48	48
Lowell, Mass.....	16	15	20	24	Norfolk, Va.....	25	17	25	32
Lynn, Mass.....	17	23	19	18	Richmond, Va.....	52	44	47	36
New Bedford, Mass.....	18	14	11	17	Savannah, Ga.....	8	13	13	20
New Haven, Conn.....	25	20	19	26	St. Petersburg, Fla.....	52	64	58	56
Providence, R.I.....	37	41	34	27	Tampa, Fla.....	33	27	30	33
Somerville, Mass.....	4	12	8	7	Washington, D.C.....	87	87	75	93
Springfield, Mass.....	28	32	28	22	Wilmington, Del.....	14	22	17	24
Waterbury, Conn.....	15	16	14	12					
Worcester, Mass.....	37	39	37	35	<b>EAST SOUTH CENTRAL:</b>				
<b>MIDDLE ATLANTIC:</b>					Birmingham, Ala.....	37	52	38	41
Albany, N.Y.....	18	30	25	22	Chattanooga, Tenn.....	35	39	18	22
Allentown, Pa.....	24	17	26	31	Knoxville, Tenn.....	22	18	18	21
Buffalo, N.Y.....	63	63	94	83	Louisville, Ky.....	56	70	77	40
Camden, N.J.....	21	28	30	25	Memphis, Tenn.....	57	52	72	48
Elizabeth, N.J.....	19	12	11	24	Mobile, Ala.....	14	16	18	28
Erie, Pa.....	26	30	28	30	Montgomery, Ala.....	16	13	13	10
Jersey City, N.J.....		33	44	33	Nashville, Tenn.....	51	39	58	48
Newark, N.J.....	46	47	42	37	<b>WEST SOUTH CENTRAL:</b>				
New York City, N.Y.....	939	960	923	919	Austin, Tex.....	21	19	17	15
Paterson, N.J.....	15	15	19	30	Baton Rouge, La.....	17	12	17	16
Philadelphia, Pa.....	275	251	280	203	Corpus Christi, Tex.....	9	13	13	11
Pittsburgh, Pa.....	126	105	97	93	Dallas, Tex.....	66	64	49	69
Reading, Pa.....	36	29	28	28	El Paso, Tex.....	11	10	17	17
Rochester, N.Y.....	57	66	65	80	Fort Worth, Tex.....	38	27	26	25
Schenectady, N.Y.,.....	21	14	19	12	Houston, Tex.....	78	74	78	78
Scranton, Pa.....	22	17	17	41	Little Rock, Ark.....	32	21	31	28
Syracuse, N.Y.....	27	36	38	34	New Orleans, La.....	92	109	79	87
Trenton, N.J.....	27	18	14	16	Oklahoma City, Okla.....	38	35	34	33
Utica, N.Y.....	22	26	19	20	San Antonio, Tex.....	55	51	55	50
Yonkers, N.Y.....	23	25	20	20	Shreveport, La.....	25	22	27	14
<b>EAST NORTH CENTRAL:</b>					Tulsa, Okla.....	26	41	26	43
Akron, Ohio.....	33	32	33	26	<b>MOUNTAIN:</b>				
Canton, Ohio.....	17	18	22	23	Albuquerque, N. Mex.....	21	9	19	9
Chicago, Ill.....	373	376	325	399	Colorado Springs, Colo...	11	14	10	15
Cincinnati, Ohio.....	68	81	93	92	Denver, Colo.....	77	75	55	68
Cleveland, Ohio.....	95	107	114	105	Ogden, Utah.....	15	14	10	4
Columbus, Ohio.....	75	50	58	76	Phoenix, Ariz.....	63	55	58	46
Dayton, Ohio.....	44	50	52	42	Pueblo, Colo.....	8	14	5	10
Detroit, Mich.....	197	191	173	195	Salt Lake City, Utah.....	22	35	22	15
Evansville, Ind.....	19	23	28	22	Tucson, Ariz.....	27	24	27	21
Flint, Mich.....	27	23	21	19	<b>PACIFIC:</b>				
Fort Wayne, Ind.....	26	22	26	29	Berkeley, Calif.....	11	13	8	11
Cary, Ind.....	22	11	15	12	Fresno, Calif.....	21	27	24	24
Grand Rapids, Mich.....	33	27	39	44	Glendale, Calif.....	24	28	35	20
Indianapolis, Ind.....	75	76	68	96	Honolulu, Hawaii.....	25	14	23	12
Madison, Wis.....	16	21	14	27	Long Beach, Calif.....	34	38	28	48
Milwaukee, Wis.....	91	50	87	67	Los Angeles, Calif.....	299	287	255	287
Peoria, Ill.....	17	14	20	17	Oakland, Calif.....	41	38	42	40
Rockford, Ill.....	15	8	17	16	Pasadena, Calif.....	33	19	29	21
South Bend, Ind.....	27	26	26	25	Portland, Oreg.....	121	67	62	64
Toledo, Ohio.....	67	68	61	59	Sacramento, Calif.....	38	33	36	33*
Youngstown, Ohio.....	35	30	44	51	San Diego, Calif.....	53	36	40	47
<b>WEST NORTH CENTRAL:</b>					San Francisco, Calif.....	91	108	92	113
Des Moines, Iowa.....	38	31	35	34	San Jose, Calif.....	25	20	20	20
Duluth, Minn.....	19	18	18	16	Seattle, Wash.....	96	76	79	92
Kansas City, Kans.....	25	19	14	14	Spokane, Wash.....	30	33	29	38
Kansas City, Mo.....	75	80	79	67	Tacoma, Wash.....	26	20	27	28
Lincoln, Nebr.....	16	17	15	22					
Minneapolis, Minn.....	69	70	69	79	San Juan, P.R.....	(---)	(---)	(---)	(---)
Omaha, Nebr.....	40	40	47	55					
St. Louis, Mo.....	145	137	113	149					
St. Paul, Minn.....	27	43	36	39					
Wichita, Kans.....	33	20	34	37					

<sup>o</sup> Current Week Mortality for 108 Selected Cities

\*Estimate - based on average percent of divisional total.  
 Totals for previous weeks include reported corrections.

4(A) Total Mortality, all ages.....	11,254
4(B) Pneumonia-Influenza Deaths, all ages.....	355
4(C) Total Deaths under 1 Year of Age.....	701
4(D) Total Deaths, Persons 65 years and over.....	6,166

NOTE: All deaths by place of occurrence.

DEATHS AMONG PERSONS 65 YEARS AND OVER IN  
108 U.S. CITIES

The weekly average number of deaths among persons 65 years and over in 108 cities for the four-week period ending June 13 was 6,177 as compared with an expected weekly average of 6,431.

### Summary of Deaths Among Persons 65 Years and Over

	Week Ending				4 Week	Weekly
	5/23	5/30	6/6	6/13	Total	Average
Observed	6,311	6,131	6,101	6,166	24,709	6,177
Expected	6,517	6,458	6,402	6,349	25,726	6,431
Excess	-206	-327	-301	-183	-1,017	-254



(See Table, page 215)

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
Communicable Disease Service  
Atlanta, Georgia 30333

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Official Business

POSTAGE AND FEES PAID  
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THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 11,000 IS PUBLISHED BY THE COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

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IN ADDITION TO THE ESTABLISHED PROCEDURE FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASES. SUCH ACCOUNTS SHOULD BE ADDRESSED TO:

SHOULD BE ADDRESSED TO:  
LAWRENCE K. ALTMAN, M.D., EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333

NOTES: THESE PRELIMINARY DATA ARE BASED ON WEEKLY TELEGRAMS TO THE COMMUNICABLE DISEASE CENTER BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS.

SYMBOLS - - - DATA NOT AVAILABLE  
· QUANTITY ZERO

PROCEDURES FOR CONSTRUCTION OF VARIOUS MORTALITY CURVES  
MAY BE OBTAINED FROM STATISTICS SECTION, COMMUNICABLE DISEASE  
CENTER PUBLIC HEALTH SERVICE, U.S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE, ATLANTA, GEORGIA 30333.